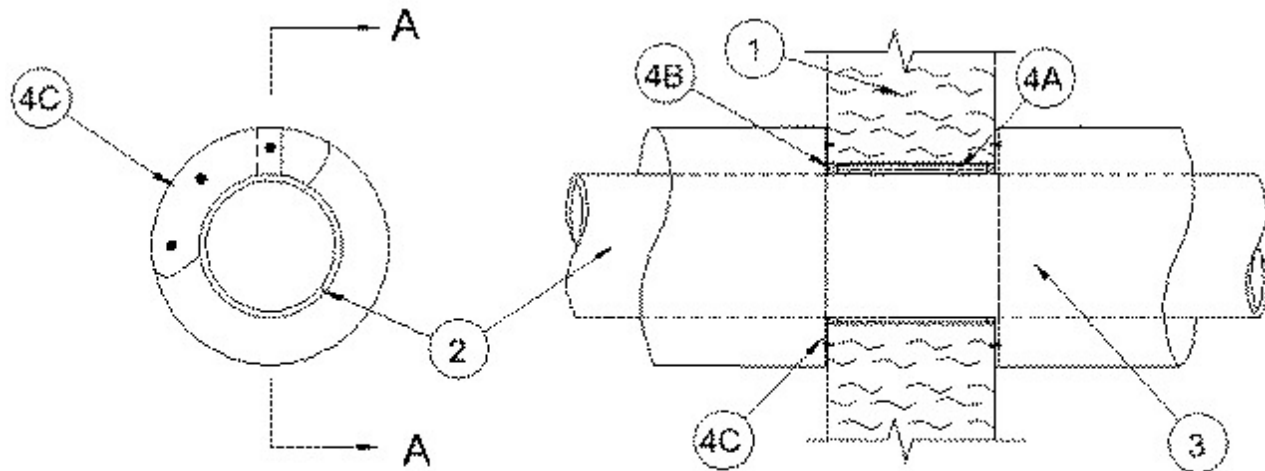


System No. W-N-5003

September 16, 2005

F Ratings — 1 and 2 Hr (See Item 1)

T Ratings — 1 and 2 Hr (See Item 1)



Section A-A

1. Wall Assembly — The 1 or 2 hr fire rated composite wall assembly shall be constructed of nom 4 in. (102 mm) or 7 in. (178 mm) thick, respectively, galvanized steel or painted galvanized steel faced **Partition Panel Units*** (CJMR) installed in the manner specified in Wall and Partition Design No. U050 in the Fire Resistance Directory. Max diam of opening is 6-7/8 in. (175 mm). Opening can be located on or off panel unit joints.

The hourly F and T Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

METL-SPAN, A DIVISION OF NCI GROUP, INC. — ThermalSafe Partition Units

2. Through-Penetrants — One metallic pipe or tube to be installed eccentrically or concentrically within the opening. An annular space of min 1/4 in. (6 mm) to max 1/2 in. (13 mm) is required within the firestop system. Pipe or tube to be rigidly supported on both sides of the wall assembly. The following types and sizes of metallic pipe or tubing may be used:

- A. **Steel Pipe** — Nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. **Iron Pipe** — Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe.
- C. **Copper Tubing** — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
- D. **Copper Pipe** — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. Pipe Covering* — Nom 2 in. (51 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m³) glass fiber units jacketed on the outside with an all service jacket. Pipe covering discontinuous through wall opening with ends of pipe covering to butt tightly against cover plate (Item 4C) at each side of wall. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.

See **Pipe and Equipment Covering — Materials (BRGU)** category in the Building Materials Directory for the names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or

less and a Smoke Developed Index of 50 or less may be used.

4. **Firestop System** — The firestop system shall consist of the following:

A. **Packing Material** — Min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Min 3-1/4 in. (83 mm) and min 6-1/4 in. (159 mm) thickness required for 1 hr and 2 hr rated walls, respectively. Packing material may be recessed from one or both surfaces of wall to accommodate the thickness of the optional fill material (Item 4B).

B. **Fill, Void or Cavity Material* — Sealant** — (Optional) - Nom 3/8 in. (10 mm) thickness of fill material applied within the annulus, flush with one or both wall surfaces.

See **Fill, Void or Cavity Material** (XHHW) category in the Building Fire Resistance for the names of manufacturers. Any sealant or caulk material meeting the above specification and bearing the UL Classification Marking may be used.

C. **Cover Plate** — Cover plate available from the wall panel manufacturer or field provided. Cover plate fabricated from two pieces of min 0.019 in. (0.48 mm) thick galv or painted galv sheet steel, cut to a ring shape with an inside diameter equal to the outside diameter of the penetrant. The outside diameter of the cover plate shall be 4 in. (102 mm) greater than outer diam of penetrant, with a radius 2 in. (51 mm) greater than the radius of the metallic penetrant. Two halves of cover plate installed around through penetrant with nom 1 in. (25 mm) overlap at the mating ends. Cover plate secured to steel wall panel skin with min 1/8 in. (3 mm) diam stainless steel rivets or min No. 12-14 hex washer head (HWH) steel screws. One fastener to be located at each overlap with intermediate fasteners located max 4 in. (104 mm) on center around periphery of opening. Fasteners located min 3/8 in. (10 mm) from cut opening in wall panel.

*Bearing the UL Classification Mark